



HAMATEURCHATTER



One of the World's Oldest Continuously Active Radio Amateur Clubs - since 1917

Vol. 15 No. 5 - May, 2007

PRESIDENT'S LETTER

by Howard, AB9FH

The May flowers are blooming around us in Hartford. I can tell because I need to take allergy medicine every day. The nice weather is getting me thinking more about antenna possibilities. There was a QST article just a month or so ago about a 2m – 70cm TV twinlead J-pole which I would like to put on the roof. Come to think of it, we did a program at a meeting where people had the chance to assemble 2m J-poles. I still have that antenna...somewhere. The dual-band version introduces a short stub of coax on the vertical portion of the antenna. This might make a good activity for a future meeting.

Don't forget--our annual auction is this month! Bring in those treasures, those antiques-to-be. Make room in the shack for more stuff. A generous ex-ham has donated a tower and rotator, and we have some valuable ARRL books. That should provide some grist for the mill. Elections for 3 board members take place also.

I have received a suggestion for a new venue in which to offer ham radio classes. A local municipality will offer a license class as a part of their recreation program if we provide an instructor. The slight

downside to this is the class can't be free—the city charges a minimal fee. But the class will get more publicity than we can usually arrange. Anyone interested in helping out? I think this might be worth pursuing.

Look for more information about our 90th anniversary event coming soon. I can say this with reasonable confidence, that if we don't work on it soon, we won't have time to have an event!!

If you haven't visited our club website www.w9rh.org recently, let me encourage you do to so. It is amazing what happens when someone with energy and creativity takes over. Brian K9LCQ is making updates, additions and improvements. It is definitely worth checking regularly.

One last item: The Wednesday night code practice on the club repeater has evolved into review of material for the General class exam. This is great stuff! I am always excited to see hams taking up the Elmering mantle. Better still for the club when they use our repeater to do it.

73

Howard, AB9FH

MRAC Officers

President	
Howard Parks	AB9FH
Vice President	
Joe Schwarz	N9UX
Secretary	
Sarah Parks	KB9ZNC
Treasurer	
Mark Tellier	AB9CD

Board of Directors

Pancho Doneis ('05-'07)	KA9OFA
Tom Liebe ('06-'08)	WI9TOM
Ted Stiller ('06-'08)	WA9RDI
Jerry Wahlen ('05-'07)	WA9CGE
Dick Wood ('05-'07)	W9JBE

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HamateurChatter Emailings

Joe Schwarz	N9UX
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Regular Mailings

Dick Wood	W9JBE
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www.w9rh.org

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Milwaukee, WI 53207-0695
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NETS HEARD IN THE MILWAUKEE AREA

DAY	TIME	MHz	ACTIVITY			
Daily	6:00-8:00 AM	14.2900	Milwaukee / Florida (SSB)	Wed.	8:00 PM	145.130- ARRL voice news
Daily	5:15-6:00 AM	3.9850	Wisconsin SSB net	Wed.	9:00 PM	145.130- MAARS Swapnet
Daily	7:30 AM	144.1550	Breakfast RoundTable (SSB)	Wed.	8:00 PM	147.270+ Weather & Swap Net
Daily	9:30 PM	3.9725	Country Cousins Net	Thu.	9:00 PM	50.160 6 m. SSB Net
Mon.	8:00 PM	146.8650-	ARES Net (Walworth and ARRL news)	Thu.	9:00 PM	146.910- Computer Net
Mon.	8:00 PM	146.4450	Emergency Net	Fri. 8:00 PM 28.490 MRAC W9RH 10 m. Net (SSB)		
Mon.	8:45 PM	147.1650	ARRL voice news (ARES)	Fri. 9:00 PM 145.390- W9RH 2 m. FM Net after 10 mtr. net		
Mon.	9:00 PM	50.1600	6 m. SSB Net	Sat	9:00 PM	146.910- Saturday Night Fun Net
Mon.	9:00 PM	147.1650	ARES Net (Milwaukee-Waukesha)	Sun.	8:30 AM	3.985 QCWA (Chptr 55) (SSB)
Tue.	9:00 AM	50.1600	6 m. 2nd Shifters' SSB Net	Sun.	9:00 AM	145.565 X-Country Simplex Group (FM)
Tue.	8:00 PM	144.2500	Badger Contesters (SSB)	Sun.	10:00 AM	443.800 FM-38 link to 146.88 Baraboo Swapnet
Tue.	9:00 PM	50.1600	6 m. SSB Net	Sun.	8:00 PM	28.365 MKE Guardian chptr 10-10 net
Wed.	8:00 PM	28.365	MKE Guardian chptr 10-10 net	Sun.	8:00 PM	146.910- Information Net
				Sun.	9:00 PM	146.910- Swap Net

2 meter repeaters are offset by 600 KHz -- 70 centimeter repeaters are offset by 5 MHz
SSB frequencies below 20 meters are LSB and for 20 meters and above are USB

HAMATEURCHATTER

HamateurChatter is the newsletter of MRAC (Milwaukee Radio Amateurs' Club), a not for profit organization for the advancement of amateur radio and the maintenance of fraternalism and a high standard of conduct.

MRAC Membership dues are \$17.⁰⁰ per year and run on a calendar year starting January 1.

MRAC general membership meetings are normally held at 7:00 p.m. the last Thursday of the month except for November (3rd Thursday due to Thanksgiving) and December, when Christmas dinner takes the place of a regular meeting.

Meetings are held at:

Redemption Lutheran Church
Fellowship Hall
4057 N. Mayfair Rd.
Milwaukee, WI

UPCOMING PROGRAMS

The May MRAC meeting will feature our Annual Auction and Election of three Board of Directors members.

Our June meeting will be a Field Day overview which is Saturday and Sunday, June 23rd & 24th, this year, which puts it the week before our June meeting.

Only 26 meeting will feature Tom Liebe, WI9TOM, talking about PSK 31.

CREDITS

Our thanks to our news contributors this month:

WA9JOB KA9OFA KF9PU
K9LCQ KB9ZNC

Our thanks also goes to:

Rita Doneis, Hal Newton, and Tom Fuszard, for proofreading the 'Chatter this month.

Thanks also to Dick Wood



for mailing the hard copy of the 'Chatter and to Joe Schwarz, who Emails the 'Chatter.

Howard Parks, who administers our Web Site.

Mark Tellier, Tom Fuszard, and Tom Czaja who manage our VEC.

T h a n k Y O U !

GENERAL MEMBERSHIP MEETING 4/26/07

By SARAH PARKS, KB9ZNC

The meeting was called to order at 8:11 p.m. by our president Howard, AB9FH.

The mic was passed for all to identify.

Following Buzz Talk, the minutes were read. There were no corrections, but Brian, K9LCQ, noted that there was an event already taking place on the date set for the 90th anniversary. Pancho, KA9OFA, made a motion to accept the minutes. Tom, N9UFJ, seconded the motion.

Mark, AB9CD, was not in attendance, so there was still no treasurer's report.

Howard, AB9FH, asked for a volunteer to pick up mail from the club's P.O. box as it was in an awkward location for the president and the treasurer to access. Les, AB9EY, volunteered.

Howard requested volunteers for a nomination committee, or better yet, candidates. There was one director position for which no one was running. Howard also said board meeting locations could be changed. Pancho asked if there was a chance meeting dates could be changed as well; Howard said this would be looked into.

There was already interest in another Technician class; Howard, AB9FH, said we might hold another one in the fall. Anyone interested in a General study group should contact the board, or listen on Wednesday nights when Dick, WB9PTC, goes over the questions for the General test.

Howard mentioned the Ozaukee Radio Club is having their swapfest on May 5th; anyone with an item or two or who wouldn't mind sitting at the table for awhile was welcome to stop by the MRAC table.

For new business, Brian, K9LCQ, pointed out various ways of getting additional points for Field Day, such as having a packet station, a transmitter using solar power or setting out information about the club. There was some further discussion on Field Day dealing with when it meets, and our chairmen this year.

The next item was the Greater Midwest Relay. The board was contacted by the leaders of the relay, requesting use of our repeater from 5 p.m. Friday May

18th until 1 A.M. Saturday May 19th. Our Friday night net will be interrupted; hopefully it won't be too serious a problem.

Tom Fuszard, KF9PU, spoke briefly on a minor glitch in the FCC system and the use of Federal registration numbers. He said the QPC (Question Pool Committee) for the Extra question pool will be looking for ham involvement in a relatively short time

Howard, AB9FH, announced that any members who have failed to renew will no longer receive the 'Chatter. Ted, WA9RDI, requested again that people come forward for nominations. Pancho, KA9OFA, made a motion to close the meeting. The motion was seconded by Dick, WB9PTC.

Meeting was adjourned at 9:10 p.m.

Respectfully submitted,

Sarah, KB9ZNC

OTA CW CLASS

Don't forget our **OTA (Over The Air) CW** Practice and Operating Practices on our W9RH repeater at 145.39 MHz with a PL of 127.3Hz.

Dick McNew, WB9PTC, is currently doing the honors on our repeater. Not only is he sending CW, but he also talks about operating procedures, which is actually pretty interesting. He also has some of the other more experienced operators chiming in from time to time. When he is unable to do it, sometimes Buck, K9RYW, takes over. Dick would like some help so he can do it on Monday evenings also.

The classes are currently on Wednesday evenings at 6:00 p.m.

Please, check in and give them some feedback so they will know how they are doing.

FIELD DAY?

By **PANCHO DONEIS, KA9OFA**

What is Field Day?

Well, it's an activity or event whereby an individual or group of people set up radio stations under more or less emergency situations, then get on the air with this equipment and see how many contacts they can make. Those Field Day sites could be a public park the shore of a lake, stream or just about any type of other location. Some use emergency power (gasoline, solar, steam or other) and other rigged antennas (various combinations of concocted systems). It's basically a test to check how easily a person or group can put a station together and get on the air.

Our Field Day site is at **Pioneer Village**, which is about **ten miles north of Cedarburg on Highway "I"**, just north of Hawthorne Hills Country Club. We have the use of the Cedarburg train depot, which was moved to the site a number of years ago under the guidance of Fred Linn, W9NZF. (The depot even has a set of tracks running in front with a caboose on it). The last time I was there the telegraph system still worked. We couldn't ask for a nicer F.D. site. If the weather gets stormy we can pull our equipment into the baggage area out of the elements and operate providing there is no lightning activity. We can also operate from in the depot at the telegrapher's desk or waiting room or even under the depot canopy. We do have our own club equipment or you can bring your own to connect with some of our antennas.

We may use various modes of communication including SSB, CW, Amateur TV, slow scan TV, radio teletype, and PSK 31, among others. We might even use an amateur satellite to communicate. There are so many ways to communicate if you are a HAM and any of them may be used at a field day site.

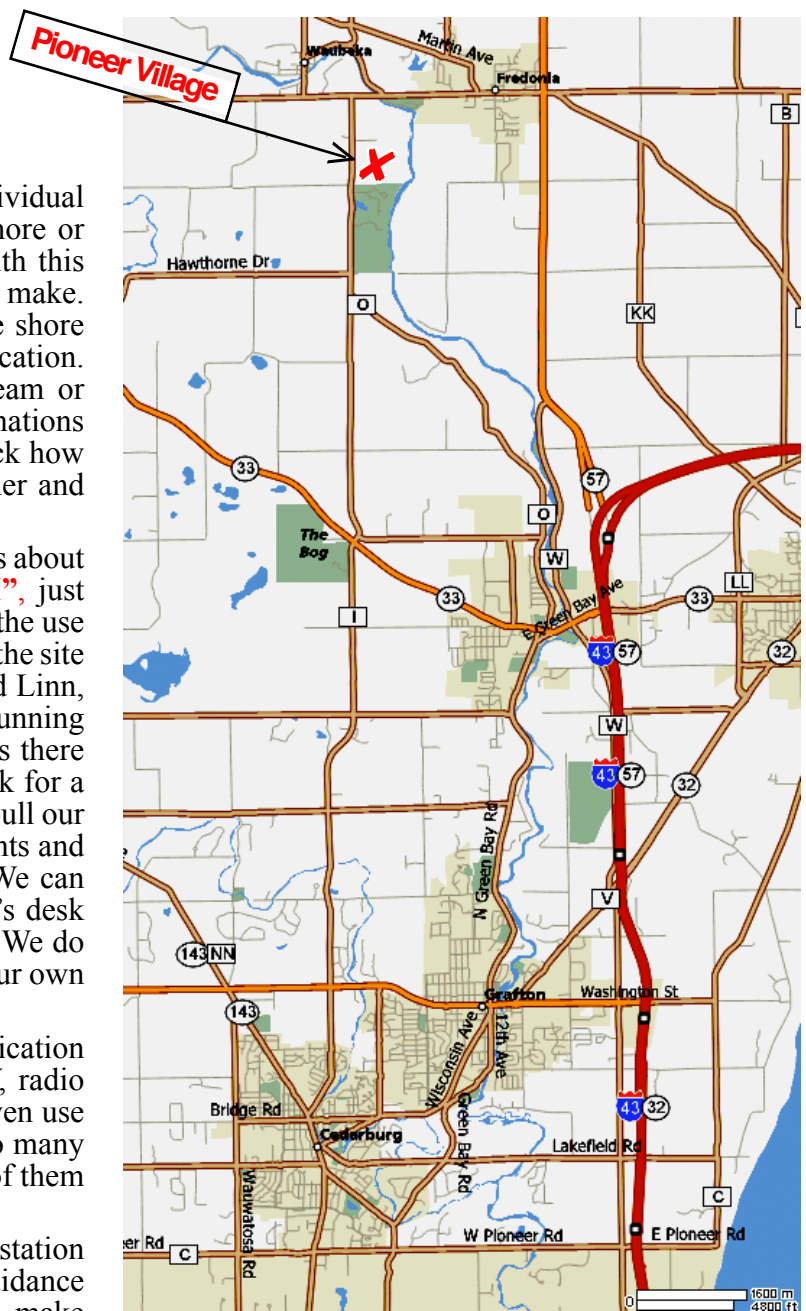
We usually also have a GOTA (Get On The Air) station with which an unlicensed operator may, with guidance from a licensed operator, get on the air and make contacts.

Join in the Field Day fun on **Saturday, June 23rd** and **Sunday June 24th**. Some of us start arriving at the Field

Day site around 8:00 a.m. on Saturday and start setting up. Then we have some lunch (provided by the MRAC). Then at around 1:00 p.m., we start operating. There are usually people operating around the clock. The operation comes to a halt around noon on Sunday and we tear down the operation and pack up to go home.

You can come for an hour or two or come for the whole time. Bring your sleeping bag, sleep on a depot bench or bring a tent or camper and your mosquito repellent (though in the past the mosquitoes haven't been bad), sunscreen or what have you. The club provides food and liquid refreshments. Bring your family and friends. It's also our annual club picnic. It's a great time to get together and have fun, of amateur radio camaraderie, cooperation, learning, and fresh air.

So, Y'all come on out!!!



Map to Pioneer Village - ten miles north of Cedarburg on Hwy I

THIS MEETING 5/31/07

ANNUAL AUCTION & ELECTION

By PANCHO DONEIS, KA9OFA



This meeting which will be held on Thursday, May 31st, will offer our MRAC Annual Auction AND our an election for three Board members.

The annual auction will feature all kinds of electronic equipment, including HAM gear, test equipment, as well as other assorted do-dads, etc. Dave DeFebo will again be our auctioneer. The money garnered from the sale of items can either be donated to the MRAC or if any item is over \$5.⁰⁰ there will be a club charge of 10% which will go into the general MRAC account. Come and bring your stuff and/or wallet or check book to this once a year event.

The election is to be for three Board of Directors. We have two people who will run for re-election and one person who is a maybe. If you would like to run for a BOD position or know of someone who you think might be a good candidate, please come to the meeting and let it be known. We would like for this to be a real election rather than a fill-in of the positions by always the same people. We would like to, for once, have more candidates than positions to make it a real election.

We need new blood, new ideas, new inspiration. We need people who would want to do something for the good of MRAC.

Come on! Volunteer! Let's have a real election.



INDUCTANCE AND CAPACITANCE AFFECT

ANTENNA EFFICIENCY

By NELS HARVEY, WA9JOB

Radiation resistance is what the radio energy sees when leaving your antenna.

Simply put, the reference, a resonant 1/2 wave antenna will exhibit about 70 ohms of resistance in free space. A quarter-wave whip on your automobile will exhibit about 35 ohms of resistance, or about half of the reference antenna resistance.

A 1-wavelength antenna will exhibit about 88 ohms of resistance.

A 2-wavelength antenna will exhibit about 112 ohms of resistance

A 5-wavelength antenna will exhibit about 140 ohms of resistance

A 10-wavelength antenna will exhibit about 160 ohms of resistance.

If a dipole antenna is resonant for a frequency higher than the one you are operating on, it will display a capacitive reactance shift. The antenna is too short in that case. Conversely, if an antenna is resonant for a frequency lower than the frequency you are operating on, it will display an inductive reactance. The antenna is too long to be resonant on your frequency.

Antenna reactance is considered the 'J' factor. A +J means inductive reactance, and a -J means capacitive reactance. The J factor is at right angles to the pure resistance, and lumped J factors add and subtract to a single J factor value.

The Pythagorean theorem then is used to determine the true circuit impedance that the feedline and transmitter see.

For example, a dipole antenna cut to a specific frequency has about 70 ohms radiation resistance and minimal reactance at its resonant frequency. If either capacitive or inductive reactance of about 35 to 36 ohms is added, the impedance will be very close to 50 ohms. If this antenna has the reactance added at its feed point, the coax and the transmitter will effectively see 50 ohms impedance. That is what the matching network found on many antennas does.

In order for the antenna to properly radiate the RF energy applied to it efficiently, it must be matched to the feedline and transmitter properly. The correct antenna design puts the tuning at the antenna, rather than at the transmitter. Assuming a 50-Ohm feedline and a transmitter set up to work into a 50-Ohm load, if the antenna represents a 50-Ohm load, the signal will radiate efficiently.

A tuner at the output of a transmitter will provide a match to the transmitter, making it happy, and will permit loading of the feedline and coax. This will not make the antenna perform any better, but will permit the maximum power transfer possible to the antenna used.

If the dipole antenna is shortened in an effort to tune it, you will be raising its natural resonance point. The resulting added capacitance will result in a lower VSWR on a meter, and the transmitter will be happier, but the radiation efficiency of the antenna and the transfer of power will have been reduced.

EVENTS

MRAC General Meeting
Thu., - May 31, 2007
7:00 p.m.

HamFest, Computer & Hobby Show
Starved Rock Radio Club
Sat. & Sun. - June 2-3, 2007 •
Bureau Co. Fairgrounds
Princeton, IL
T/I on 146.955- (PL 103.5)
www.qsl.net/w9mks/hamfest.htm

50th Annual HamFest
Six Meter Club of Chicago
Sun. - June 10, 2007
Dupage Co. Fairgrounds
Wheaton, IL
T/I on 146.370/146.970 (PL107.2)
www.qsl.net/k9ona



Field Day
Sat. & Sun. - June 23 & 24, 2007

See details elsewhere in this issue.

MRAC General Meeting
Thu., - June 28, 2007
7:00 p.m.
This is after field Day!

SMARC SwapFest 07
Sat. - July 7, 2007
American Legion Park
Oak Creek, WI
T/I on 146.52 simp

Aurora HamFest
Sun. - July 15, 2007
Aurora Central High School
Aurora, IL

Tentative date
Special MRAC
Anniversary Event
Sat.-August 4, 2007

* indicates VE testing
is available.

VE NEWS

BY Tom, KF9PU

A total of 40 people visited our session on April 28. Twenty-two of those walked away General Class licensees. Among the rest were a sprinkling of Tech and Extra Class ops. VEs who assisted during the session included:

Larry Noldan ----- KC9IJA
Ted Stiller ----- WA9RDI
Bernie Golownia ----- AA9CI
Nels Harvey ----- WA9JOB
Gabe Chido ----- WI9GC
Naomi Potash ----- KC9GSS
Mark Bye ----- KB9LDX
Mark Tellier ----- AB9CD
Bob Diehl ----- WB9KMT
Wes Andersen ----- N9YE
Pancho Doneis ----- KA9OFA
Ken Hahn ----- WK9H

Our next session will be held on May 26 at AES. We'll test from 9:30 to 11:00.

MRAC VEC financial report for April 2007.

Beginning balance: \$4,407.50
Income: \$205.00
Expenses: \$17.41
Ending balance: \$4,595.09

REMINDERS

Please check into our nets on Friday evenings.

Our **ten meter SSB** net is at **8:00 p.m. at 28.490 MHz \pm 5 KHz USB.**

Our **two meter FM** net follows at 9:00 p.m. on our repeater at **145.390 MHz**, minus offset and a **PL of 127.3 Hz.**

Join us for Saturday morning breakfast at **Maxim's Restaurant, 18025 W. Capitol Dr.** We usually meet at around 8:00 a.m., and order around 8:15 a.m. The food and the company are good and you don't have to be a member of the club to join us.

CQ Third Tuesday
Come to CQ Third Tuesday at:
Old Country Buffet
16750 West Bluemound Rd.
Brookfield, WI

This gathering of HAMs meets on the third Tuesday of every month.

We start arriving there at 11:00 a.m. and leave when we're full and/or all talked out.

EXAM SCHEDULE

BY TOM FUSZARD, KF9PU

MRAC VEC
Exam Schedule
Spring and Summer

Sat., May 26 9:30 a.m. @ AES

No VE Exams in June or Aug.

Sat., July 28 9:30 a.m. @AES

www.w9rh.org/testing.htm/

AES = Amateur Electronic Supply
5710 W. Good Hope Rd.
Milwaukee, WI

Here is a scheduled of the VE Test Sessions in Janesville, Wisconsin for 2007:

July 21, 2007

October 20, 2007

The time and location is listed on the ARRL Listed Test Sessions or on my **N9FRY** call page under QRZ.COM.

The next meeting of MRAC
will be **Thursday, May. 31, 2007**
at **7:00 p.m.**

Redemption Lutheran Church

Fellowship Hall

4057 N. Mayfair Rd.

(Use the south entrance)

HANDICAPPED ACCESSIBLE

Please, DON'T call the church.

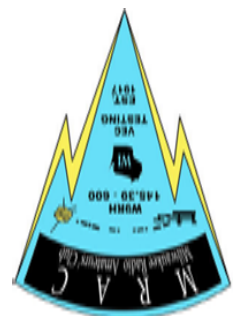
**Our Repeater,
Talk it up.
145.390- MHz
(127.3 Hz PL)**

**Our program for the
May 31st general
meeting will feature:**

**Our Annual MRAC Auction
and Election of three
Members of the
Board of Directors.**

Visit our website at: www.w9rh.org

Our phone **(414) 332-MRAC**
332-6 7 2 2



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First Class